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ABSTRACT

Interinstitutional cooperation is becoming more and more evident today as colleges and universities seek new ways to expand facilities, offer innovation, and strengthen departments. In this booklet, 91 different types of cooperative arrangements have been selected from different disciplinary areas to illustrate the kinds of progress that can be achieved in interdepartmental or interdivisional programs, regardless of the nature of that discipline. For instance, while some description is given of the electronic music laboratory sponsored by Five Colleges, Inc., the interest in maintaining a specialized laboratory facility is not limited only to music faculty, but may encompass physicists, psychologists, and others as well. If cooperation is to be seen as an appropriate vehicle for strengthening any departments, however, arrangements employed shall have to be planned to meet the real needs of these departments. Joint ventures should be initiated because they are desirable, not solely because they are possible. Originally appeared as Level III document ED 065 023. (Author/HS)

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INTERINSTITUTIONAL COOPERATION AT THE DEPARTMENTAL LEVEL

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PREFACE

A recent bibliography[1] listed approximately 550 books, articles, speeches and book chapters which dealt either directly or indirectly with some aspect of the process of inter-institutional cooperation. Despite the number of entries there was a significant omission. Most published manuscripts fell into one of the following categories: 1) public relations; 2) organizational concepts; 3) interconsortium communications; 4) surveys of cooperative practices; 5) philosophical statements; or 6) overviews of recent developments in the consortium movement. There is little doubt that contributions to each of these categories serve real and important educational and theoretical functions. At the same time, however, a basic perspective has been missing. A focus on presenting information suitable for transfer and implementation of experience has been largely disregarded.

Except for the "dog and pony show" variety of program descriptions, few attempts have been made to compile and reorganize available information into a form that is directly usable by either faculty or institutional administrators. Most individuals simply cannot wade through various and sundry listings and publications, seeking materials that might provide them with program descriptions they can utilize as solutions to their own problems. A comprehensive picture of what is being attempted by consortia around the country might not appear even after an extensive review because some types of programs have not been written up in the professional literature; they only appear in fugitive papers and documents that are not widely circulated. Targeted program descriptions and usable information are essential if existing efforts are to have a more substantive impact as "models" than has been true to date.

This booklet, **Interinstitutional Cooperation at the Departmental Level**, is a first attempt to draw upon information that is already available and to organize it for faculty and department chairmen. These individuals can review the organization and operation of their departments with an eye toward strengthening their educational, research or community service capabilities through joint ventures with their colleagues at other institutions. By displaying a brief yet comprehensive review of the forms successful cooperative ventures have taken among specific academic departments, it is hoped that a firm basis for departmental analysis will be presented and that potentially viable ideas can be utilized. The presentation of a variety of structures of direct departmental importance should be of assistance in suggesting adaptations that could be instituted if, in fact, the adoption of similar approaches is desirable.

To be sure, "interinstitutional cooperation" is not a simple, cook-book process. The creation of many consortia has been unsatisfactory because a simplistic belief existed that the formalization of an organization permitted the easy transfer of program ideas from one location to another. Except for a few forms of cooperation such as visiting scholars programs, guidance-counselor tours, or library delivery systems, seldom can an agreement worked out in one consortium be assimilated rapidly or easily by another group of colleges. Discrepant personality traits of individuals, distinctive institutional characteristics, shifting priorities of funding agencies, varying staff capabilities, technical incompatibility of equipment and the fluctuating degree of mutual trust in existence among cooperating institutions suggest a few of the situational variables within which ideas are planted. Despite the evident problems, institutional staff can, with imagination and persistence, begin to emulate approaches already taken with good effect elsewhere. It is doubtful that colleges will be desirous of replicating the precise structure and content of most programs already in operation without fresh insight and without adaptation to relevant circumstances. If efforts of these institutions are productive the results of cooperation by a given set of departments should reflect the uniqueness and character of their own consortium. The chemistry of cooperation is highly dependent upon creativity as a catalyst.

In this booklet ninety-one different types of arrangements have been selected from different disciplinary areas to illustrate the kinds of progress that can be achieved in interdepartmental or interdivisional programs, regardless of the nature of that discipline. For instance, while some description is given of the electronic music laboratory sponsored by Five Colleges, Inc. the interest in maintaining a specialized laboratory facility is not limited only to music faculty, but may encompass physicists, psychologists and others as

1. Patterson, Lewis D. *Comprehensive Bibliography on Interinstitutional Cooperation*, Kansas City Regional Council for Higher Education: Kansas City, Missouri, 1971.

well. Transferring the implications one such venture may have for a particular group of departments or disciplines is no small task. To develop a fairly complete spectrum of opportunities potentially useful demands careful thought and analysis. Competent planning is never easy. This booklet should ease this task.

If cooperation is to be seen as an appropriate vehicle for strengthening any departments, however, arrangements employed shall have to be planned to meet the real needs of these departments. Joint ventures should be initiated because they are desirable, not solely because they are possible. It is similarly unlikely that any one set of departments will be able to adopt more than three or four joint arrangements at any one time. Intercollege cooperation is but one approach to strengthening a given descipline and should not be considered as the only approach in most instances.

Two types of limitations should be recognized. While the programs and agreements described below are intended to be comprehensive, they are by no means exhaustive. One or two examples illustrating one form of cooperation that has been developed may be cited for twenty that exist. To recognize one such arrangement is not to impute a necessary superiority to that venture, but to admit to a limitation of time and energy on the author's part, as well as to a limitation of patience on the reader's. Neither does this compendium include reference to many arrangements which are not related to a specific discipline. For instance, joint programs for admissions or for jointly utilized living facilities are not noted because their existence did not originate with a specific department.

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I. THE CONSORTIUM MOVEMENT AT A GLANCE

Examine any ten recent books on the state of higher education in the United States. Check the footnotes. Leaf through the chapter headings. Scan the indexes. It is doubtful that any one of them will contain even a brief reference to an academic consortium. A general preoccupation with the concept of the traditional campus has prevented many writers from becoming sensitive to one of the most widespread and potent movements pervading higher education today. Curiously, this has been true of many reports which were calling for innovative practices and a redefinition of institutional boundaries. Both of these notions should consistently encourage consideration of consortia as one alternative for the changes they recommend. Articles related to consortium operations have largely been scattered about in journals and conference reprints read only by individuals directly involved in the creation of interinstitutional relationships. The significance of consortia in higher education's future would hardly be worth mentioning if their lack of recognition reflected an accurate assessment of the scope and depth of consortium activities in the country.

A study[2] conducted for the New York State Education Department inventoried and described over 425 different cooperative arrangements in existence between two or more colleges in New York State during the 1969-70 academic year. Ninety percent of the institutions of higher education in that state participated in such ventures. One institution alone reported over twenty-five such arrangements. An informal but comprehensive review of all of the joint activities by a committee of one large university subsequent to this study was reported to have tallied nearly two hundred relationships of varying levels of formality with other institutions in the state, country and world. An earlier national study by Moore[3] attested to the national breadth of involvement colleges had in joint programs.

Specific objectives which various consortia have been established to attain represent diverse sets of expectations for this form of organization. To accommodate their colleges to demanding pressures, college personnel have crossed institutional "boundaries" ever more frequently to improve the managerial effectiveness of their institution and to offer educational opportunities that could not be provided by a single campus. By coordinating their efforts in specific fields it has been possible for some institutions to complement one another's strengths and to lessen their weaknesses to the betterment of all. Thus, through cooperative planning it often has been possible to procure and maintain more flexible and better organized program offerings while limiting the diffusion of institutional resources in duplicate programs. The continuing objectives of the Associated Colleges of the St. Lawrence Valley represents a typical encapsulation of the rationale which underlies many formal consortia. These are:

> To expand the number and variety of educational opportunities available to students.
>
> To share institutional resources.
>
> To reduce or avoid unnecessary or wasteful duplication in programs and facilities.
>
> To make full use of specialized faculty talents, quality program offerings, and unique research or instructional facilities.
>
> To structure solutions to problems which cannot be dealt with effectively by one institution.
>
> with effectively by one institution.
>
> To provide mechanisms for exchanging and disseminating information needed to improve the operating efficiency of the member colleges.
>
> To develop programs through which the colleges can upgrade their contributions to the solution of regional problems.
>
> To provide opportunities for innovative approaches to educational programs through joint action.

Because of the voluntary nature of consortia, the initial motivation for the creation of these institutions has generally originated with the participating institutions. At the same time, however, interest in the role consortia can play in regional planning has been shown by many statewide and national study groups. Virtually all sectors of higher education recognize the potential contribution consortia can make toward enabling the nation's colleges to restructure their relationships with one another more efficiently and effectively

For the purpose of this report interinstitutional cooperation is taken to mean a process by which two or more colleges expand and improve their curricular, cultural, research, administrative, or community service capabilities through coordinated action. This broadly inclusive definition encompasses myriad forms of cooperation from relatively informal, perhaps inter-personal agreements, to separately incorporated consortia with twenty to thirty member colleges. The focus of this report will be limited almost entirely to programs operated by incorporated collegiate cooperative centers. The creation of such centers is becoming increasingly common. Although this form of organization has been in existence since 1925 when the second college at Claremont was created, a noticeable acceleration in their formation did not begin until 1961. Presently over seventy consortia have been organized that maintain these basic characteristics:

> They exist as distinct corporate entities separate from, although closely identified with, the institutions they have been created to serve.
>
> They employ their own staff.
>
> They serve three or more voluntarily associated colleges or universities.
>
> They attempt to provide a variety of cooperative programs for the member institutions.

Within cooperative centers that meet these criteria a high degree of variability exists to distinguish subgroups. Indeed, it has been argued that the number of dimensions may be

2. College Center of the Finger Lakes, *Interinstitutional Arrangements In Higher Education In New York State*. New York State Education Department, Office of Management Services in Higher Education: Albany 1970.

3. Moore, Raymond S. "Interinstitutional Cooperation." *In Search of Leaders: Current Issues in Higher Education*. (G. Kerry Smith, Ed.) American Association for Higher Education: Washington, D.C., 1967.

so great that inadequate comparability exists to permit useful generalizations to be drawn about consortia. Some consortia have an orientation toward a single problem area such as urban education or Latin American Studies, although most groups are multipurpose and are unrestricted in the kinds of programs they can adopt. Some centers serve institutions in a single city while others have memberships covering a dozen states. Memberships range from three to thirty-three and the annual fees paid by institutional members to support the consortium varies from one thousand to twenty thousand dollars and more. Similarly, the amount of funding available to different consortia from the federal government, corporations, and foundations is highly variable. Public institutions recently have begun to engage in consortia on a level commensurate with privately-sponsored colleges and universities. The involvement of public institutions provides another criterion for establishing differences between consortia.

To catalog a few of the dimensions with which to distinguish one consortium from another fails to convey some of the qualitative differences that are less easily codified and described. Unique "personalities" often characterize the sense of identity, or lack of identity, which pervades the goals, policies and programs of these groups. Seven brief descriptions below are selected as "types" representative of consortia throughout the country.

Claremont Colleges. Considered by many writers to be the earliest formal consortium, this grouping of colleges in California pioneered the idea of a cluster college. President James Blaisdell of Pomona College (a co-ed liberal arts college) worked to preserve the concept of the small college by refusing to expand the institution, and instead established Claremont College (a graduate school) in 1925 as a separate but coordinate college. In 1926, Scripps College was created as a similarly autonomous institution to offer a liberal arts program for women. These three institutions constituted the Associated Colleges of Claremont. Claremont Men's College was begun in 1947 and an undergraduate science and technology college (Harvey Mudd) appeared in 1955. Pitzer College followed in 1963 for science education. The specialization of function of these contiguous institutions approximated the structure of Oxford in England and of the later cluster colleges in the United States. As a consortium, these institutions have operated centralized auxiliary and administrative support services which include joint institutional research programs, common health and counseling staffs and facilities, a joint library, a commonly used auditorium, a central heating plant, and a combined business service. Joint appointments and exchanges of faculty are encouraged as is the cross-registration of students. Joint programs between several of the colleges exist in admissions, athletics and science majors. Each institution retains independent accreditation and autonomy, although a policy board includes each of the presidents.

Five Colleges Inc. Four institutions in the Connecticut Valley of Massachusetts, Smith College, Mount Holyoke College, Amherst College and the University of Massachusetts, have been actively fostering the exploration of the potential for cooperation between themselves since 1951. At that time the Hampshire Inter-Library Center was created to economize some of the costs of library operations of the members. The first coordinator was appointed in 1957. Projects under way have included a heavily utilized cross-registration program, joint Ph.D. programs, a joint astronomy department, an electronic music studio, a joint FM radio station, a regular bus service, common placement programs and a daily messenger service. A Five-College program of cooperation exists in Black Studies, Asiatic Studies and Latin American Studies. Recently, a new innovative institution of higher education, Hampshire College, was established through the initiative of the four founding institutions. The first long-range study of a consortium was conducted by the Five Colleges.

Committee on Institutional Cooperation. The Committee on Institutional Cooperation was voluntarily founded in 1958 by eleven major universities to develop cooperative programs in areas of instruction and research which were beyond the capacities of even the largest institutions in the country. The composition of CIC includes the Council of Ten and the University of Chicago. Substantial assistance was originally given CIC through the Carnegie Corporation. A "Traveling Scholar" plan permits graduate students to register at their home institution, but study at any one of the other universities for up to a year without additional charge. Joint academic programs exist in such fields as biometeorology, language and area studies, summer study in Mexico and junior year abroad studies. In geology, a course content improvement project was undertaken and a commonly used field camp in Utah was organized. Seed grants are regularly made available to convene exploratory conferences in new fields.

Great Lakes Colleges Association. This consortium, composed of 12 private liberal-arts colleges in four states, is governed by a board of trustees made up of the presidents of these institutions. A policy of decentralized administration is basic to an "agent college" concept under which particular institutions assume the administrative responsibility for particular programs and projects. Study abroad programs are organized in Kenya, Sierra Leone, India, Japan, Columbia, Lebanon, and Yugoslavia. An urban studies semester in Philadelphia focuses on education and social problems. An arts center in New York was also established. Conferences are held frequently in the arts and sciences as well as in administrative areas.

TAGER. The Association for Graduate Education and Research in Texas is an attempt by seven colleges and universities to utilize a microwave television network for offering "live" coursework via this medium. Course offerings originate at several points and are transmitted to participating members and industrial plants. Two-way voice transmission is possible. Closer coordination of courses of common interest is being included as the basis for further

curriculum cooperation. Four TAGER Colleges initiated an environmental studies program to augment classwork at these campuses.

Union of Independent Colleges of Art. Six colleges of art and design from California to Rhode Island have sponsored a variety of joint programs through a central office. Initial funding for the consortium came from the U. S. Office of Education. Grants are made to faculty for experimental work, for innovations in instruction, for curriculum development and for technical assistance in employing new teaching techniques. Exchanges of faculty, visiting lecturers and visual materials are coordinated. Cooperative admissions, placement and fund-raising are also undertaken.

Beyond the simple incorporation of an organization whose purpose is to simulate interinstitutional cooperation there exist less tangible, but equally important features that can be used to distinguish a group of colleges with nothing in common, other than some projects which involve them all, from a true consortium "system" accompanied by a strong sense of intercollege community.

What are the characteristics of an intercollege system? Of primary importance is the establishment of commonly accepted cooperative goals and mutual agreement on operational priorities for achieving these goals. A broad-based structure consistent with the consortium's determined purposes is also essential. Another feature is the presence of a conscious desire to achieve complementary relationships.

Cooperation may imply that achievements by consortia are the result of a coincidentally positive interaction, that several colleges by chance determine that their goals are identical, agree on a plan of action, and work together simply because their previous expectations were compatible with one another. A more accurate implication would be taken from "coordination", a term which includes the presence of a medium for negotiating goals and for developing specializations of function. In this light cooperation cannot exceed the good fortunes of happenstance, while coordination creates its own chances for success. To say that a consortium exists because there is an identifiable pattern of interaction is inadequate. Whether or not there is interinstitutional cooperation there will be interinstitutional impact. A consortium exists when the interaction is directed and planned to capitalize on the outcomes of the interrelationship, rather than having the interaction occur without goals and without an assumption of long-term commitment.

II. KEYS TO SUCCESSFUL COOPERATION

If most inventories of cooperative arrangements have been at all accurate in portraying and describing these activities in any way, it probably is correct to conclude that much of what passes for interinstitutional cooperation is more aptly described by some other phraseology. For instance, many projects that last but a year or even an afternoon might better be termed interpersonal cooperation since they do not bring about a lasting reorganization of institutional resources. When other agreements solely represent a subtle attempt to secure supplementary funding from an outside source without a substantial effort to provide the necessary means for structuring a real intercollege exchange, then one might call this intercollege collaboration instead. Fortunately, ill-construed programs seldom last, and more fortunately still, funding offices have adopted more precise techniques for determining whether a joint project design has the elements basic to a successful conclusion. It might well be that future projects with cooperation as a central theme will undergo tougher scrutiny in demonstrating their feasibility because there are so many more factors that must be accounted for.

It takes little imagination to itemize potential threats to a cooperative effort. Pressing institutional crises, overcommitment of staff and financial resources, poor personal relations within as well as among campuses, inadequate communication systems, real and imagined threats to an institution's autonomy, the disparate qualifications of faculty and students from differing colleges, and the existence of contradictory formal and informal operating procedures that prevent a reallocation of decision-making authority are but a few of these. Fruitful cooperative ventures have often emerged as much the result of chance as they were of compelling logic. Logical objectives supporting a valuable joint department in one location may be totally inappropriate for another consortium. Surface differences may be minimal, but the gulf between the two groups may be unnavigably wide. How then can a truly worthwhile program be described? Wherein lies the difference that makes a faculty development program at one consortium of central concern, while a similar venture elsewhere passes as an interim, largely peripheral activity of no lasting importance? At the risk of overlooking a few exceptions several characteristics can be advanced that distinguish the quality of some consortium operations. In most, if not all, ways these qualities are no different than could be stated for most single institution projects.

1. **They are creative**. To many persons the idea of interinstitutional cooperation itself is a new and creative idea, and so it may be for a new consortium. To be truly creative, however, implies something beyond mere newness and originality. It also connotes an ability to establish a new direction and orientation to a situation. An idea's creativity is expressed through an excitement and an understanding that was previously absent. A solution to problems that may not have been well thought through becomes creative when it clarifies the problem and points to potential avenues for resolving the problem.

2. **They are programmatic**. A program has year to year continuity and represents an accepted method of operation. Projects on the other hand are temporary undertaking. A project may in essence be as much a proposal to the agency administering the project as it is to the funding agency. A publication of the American Management Association noted that "projects are activities in search of programs."

Successful consortium arrangements are often bolstered by smooth, informal supportive environments with tran-

sient elements that are helpful but not sufficient conditions for continuing cooperation at a formal level. The consortium's activities must tie directly into the disciplines faculty are teaching, or into the techniques researchers are using to stay on the forefront of konwledge in their discipline. Its activities should have a comfortable place in the on-going affairs of the college. Problems related to joint programs must be confronted and resolved. When they are left unresolved not only does the program suffer, but other segments of the cooperative effort also begin to deteriorate. Projects can fail and disappear without a trace unless they become a regular consideration in the shaping of each college's future.

3. **They are expert.** Some consortia have been created to replicate the programs of existing consortia. No consortium, however, can be expected to establish overseas centers if its own faculty have never been involved in programs outside the country. A telephone network simply will not emerge from occasional meetings with outside experts whose consortium has already established one if the personnel at the new location do not have the expertise and interest needed to synthesize such a network. These questions are not ones of technical feasibility, but of consortium capability. To design an appropriate and coherent system of any type, whether it be social or technological, requires a persistent effort and a commitment of expertise. Whenever a program necessitates the involvement of specialized talents, the absence of talent cannot be offset by cooperation.

4. **They are academic in orientation.** Despite general assumptions regarding the economies of administering specific activities through consortia, evidence has rarely pointed out cost savings as a primary by-product of the most desirable cooperative models. Even when efficiency of operation is present, savings attained seldom exceed the overhead and the hidden costs of maintaining a consortium. College and university personnel are generally more interested in seeing their primary goals, education and research, being dealt with than they are with purely economic goals. To be certain, some institutions are in such critical financial condition that their primary concern is economic survival. Nonetheless there is virtually no documentation to show that cooperation has ever saved a college's academic life. Quite possibly the contrary can happen. Programs which offer new educational experiences to students or that expose good faculty to interested students in creative environments take precedence over purely administrative concerns. Generally when this is not the case, a sense of dissatisfaction will pervade a consortium.

5. **They are high risk.** Peter Drucker has characterized innovation as risk-taking. Foundations have supplied venture grants to support the formation of many consortia not because they were cooperative, but because they were "risks" that could not be taken by non-profit organizations without additional support. Now that the question has changed from "can we cooperate?" to "in what do we wish to cooperate?" the risk of merely forming a cooperative has disappeared. Cooperation is not only obviously possible, but also demonstrably a low-risk affair. Foundations and other agencies now are looking at the goals of the programs proposed rather than at the injunction of "cooperation" as an objective. In short, general operating support has slowly been replaced with categorical grants by funding agencies. Consequently, the ideas that are being encouraged are not those which are already proven to be possible, but rather those which might be possible if threshold support from all sources can be assembled. Although some caution is always required when attempting new ventures, there is some value in recalling the Las Vegas card dealer's observation that scared money never wins!

6. **They are of importance to the institutions.** There must always be a generic distinction between the goals of a consortium and the goals of member colleges. The purpose of a consortium, put simply, is to assist the members to do things that they could not have done alone. The purpose can never be to do something that the colleges do not wish to do. The fact that a given group of colleges does not have an urban studies program offers no support for the conclusion that the consortium should therefore establish one, even if a source of funding is present. That a project should be of vital importance to the colleges themselves is of paramount importance. Even if it lacks the other traits highlighted here, if a particular program does not engage the enthusiasm and concern of institutional personnel, or if it does not command the production of institutional commitments, its future is bleak.

7. **They are open-ended.** In large measure consortia and the programs they institute are most productive when they begin with objectives which are relatively unrestricted. Once the programs have sufficiently specific objectives to warrant implementation, there should be room for expansion and further growth, expansion with implications of significance for the entire effort. Block-bookings of speakers, for instance, may hardly be worth the manhours expended unless the economic savings and the relationships established lead into other equally fruitful areas such as joint sponsorship of events, new uses of media for enabling several campuses to speak and meet with lecturers, and so forth. The capacity of a program idea to precipitate a natural interest in fathoming the limits of that program sets a definite limit on the initial willingness of the individuals involved to achieve the first level of objectives and then to maintain their interest.

8. **They have tangible impact.** Financial commitments of substance carry with them a demand for noticeable results. There are very few instances in which some measurable outputs cannot be determined as deriving from the activities sponsored. Commonly, the first meetings of consortium representatives terminate in decisions to hold seminars, conferences or workshops. These decisions are of some value, but care must be exercised. The executive staff may become an inefficient mechanism for organizing meetings in competition with professional organizations which can take on the task with greater background and skill. Consortia can count on a certain allotment of their members' time, but only so much. The use of resources to sponsor a multicollege conference may equal those needed

to initiate a more constructive program. This is not to imply that joint meetings supplying a sense of consortium community do not serve a purpose. It is to say that the conference format should represent a threshold step into an arrangement that will amplify the prospects for achieving concrete results in a stated next phase. Vague references to goodwill, constructive attitudes or provocative discussions cannot be construed to warrant the maintenance of a formal consortium. Qualitative and quantitative changes in the instructional programs and in administrative operating patterns, not in individuals, is the ultimate goal. Therefore changes in curricular offerings, reorganization of institutional research programs, increased numbers of students exposed to a new educational setting, reduced costs, or even amounts of financial resources secured to support different activities become the indicators of success and failure. No summation on a score sheet will be satisfactory as an evaluation of a consortium's productivity, but there is little doubt that tangible improvements must be demonstrated if consortia are to remain serious elements in their institutions' planning.

9. **They permit broad access by faculty and students.** Again, institutional impact is the key. While there are numerous exceptions to this generalization, the majority of choices a consortium decides to make should involve as wide a spectrum of participants as possible, not in the planning necessarily, but in the operation. Committees do not make a consortium and meetings do not signify progress. As often as possible, techniques for acquainting faculty and staff, as well as students, with the opportunities for cooperation should be outgrowths of cooperative programs, rather than of occasional meetings to determine whether there is anything new that can be done to fit some funding agency's criteria. For some consortia and for some groups within a consortium, this principle may be impossible to uphold. But if it is possible, more effective ideas will germinate in situations in which minds are already actively engaged in seeking to learn new approaches to solving problems and in which contacts between individuals from different colleges occur naturally and spontaneously in a common setting. Despite the most intensive planning programs, the grasp of creative opportunities to mold an innovative and useful program will be expressed most frequently when the "heat is off" and the interest is high.

10. **They reinforce and strengthen existing programs.** Compatible academic calendars for institutions within a consortium represent a central component for a broad range of joint programs. Yet it is unlikely that the installation of similar daily, weekly and year-long calendars can ever be the first step any group of colleges takes. As a relatively isolated step, the potential ramifications likely to be fostered by a calendar shift are too distant, and the costs are too real for most faculty or administrators to seriously entertain this notion until more support for a change is present. After cross-registration becomes effective and following initial exchanges of professors, however, the problems attendant to maintaining disjunctive calendars assume more pressing proportions and a desire for change begins to appear. Gradually, agreement on a compatible calendar becomes a logical extension of all that went before. This is but one example. Many could be cited. Clearly, there must always be first steps that may not "reinforce" anything but existing institutional programs. Any viable consortium will have many such activities, but a growing consortium must capitalize primarily on activities that reinforce one another.

III. MAJOR DIFFICULTIES TO BE CONFRONTED

Synthesizing an effective pattern of multicollege cooperation is an extremely difficult task. An exponential increase in the problems associated with a given program accompanies the addition of institutions to any such venture. To some extent problems may be inherent to the nature of an arrangement proposed, but they may also be related to intrainstitutional difficulties that have not been resolved. When a staff member can say "It is easier for our department to cooperate with departments at other colleges than it is with departments within our college," the remark may be indicative of problems that have retarded movement elsewhere in the consortium. Any listing of problem areas could be extended, but a few considerations of particular importance should be borne in mind by consortium planners as they formulate and act on new ideas for cooperation.

1. **A new perspective of educational quality is required.** The stress higher education has placed on institutional autonomy has been a necessary element in building a strong tradition of academic freedom. At the same time, the concentration on individual campus action has restricted the emergence of less formal arrangements for improving education and research. A major reorientation is often needed to distinguish the differences between what is good for student A, and what is good for department B or professor C, and indeed to determine whether there is a clear difference at all. To engage in a joint program with another college may demand a reassessment of the standard operating procedures an institution functions through. It may require the re-evaluation of objectives being discussed, as well as the means by which these objectives can be achieved. There is little doubt that many procedures followed and many goals sought are appropriate ones for institutions and that changes are not desirable. An unusual amount of educational statesmanship is needed, however, to carefully think through the methods of operation a campus utilizes, before an individual can accept the idea that a change of significance is in order.

Isolation can be psychological, as well as social or geographical. Ten city blocks may be as great a barrier to cooperation as one hundred miles if no attempts are made to promote a strong sense of community within a consortium. When institutional staff begin to conceive of their own institution's growth in terms of the strength they can add to a consortium and in terms of the strengths they can obtain from other colleges, a major milestone is passed.

2. **Plans for joint operations should be developed realistically.** A familiar outcome of initial meetings held by consortium committees is the rapid recitation of wide-ranging and numerous arrangements that could be worked out to the betterment of all. Meetings close with a high

level of interest and excitement. Several months later the ideas that brought high hopes languish because too many problems were overlooked or avoided. The generators of ideas may have returned to their piles of ungraded papers and incomplete reports, and relegated the new ideas to a lower priority than even they intended. Equally common a problem is that no one may have the leadership to bring the ideas to a higher level of development. Cooperation can often take major steps forward, but typically progress is slow and builds upon small steps taken one at a time. Establishing and sticking to an achievable priority are essential components of consortium improvement.

The capacity of consortia to compete for funding has gone through a noticeable shift in priority now that the general concept of cooperation has been proven by the existence of seventy-plus cooperative organizations. The competition between groups of colleges has risen sharply since consortia generally are interested in similar fund sources. As the rate of formation of consortia accelerates, it becomes increasingly clear that funding agencies have become considerably more proficient at evaluating and distinguishing solid program designs which involve cooperation from proposals in which cooperation is the goal. Consequently, planners must recognize that simply including acknowledgement of cooperation in a proposal is not sufficient for securing support. The acquisition of needed funds to support program development may take longer than anticipated.[4]

3. **The individuals involved must educate themselves about the potential benefits cooperation can lead to.** There are few individuals who are sufficiently cognizant of the variety of cooperative arrangements in effect at various locations to reach rational conclusions about whether cooperation has a role to play in their field. Some forms of cooperation may come readily to mind. If they can be put into effect, fine. If they cannot, alternatives may not even be sought. By publicizing and promoting cooperative agreements within a consortium, better visibility of alternatives is possible. More significant resources are the programs of other consortia in the country. Since many joint ventures have been instituted, these should also be publicized to strengthen faculty and administrator understanding of goals that can be reached. Unless substantial consideration is given to the concrete developments elsewhere, it will be difficult to build on one's own experience. The transition from a stage at which primary concern is with the pronounciation of the word "consortium", to a stage at which joint majors are being developed will be difficult unless opportunities for self-education are provided.

4. **The consortium must maintain a relationship of neutrality with its member colleges, while balancing benefits derived by them.** The territorial imperative is at least as visible on the college campus as it is in the rest of society. No program adopted by a consortium will have equally distributed costs and benefits. Over the long run each college must feel that it is receiving a fair return on its monetary and personal investments in a consortium. To the extent that member college personnel view each consortium program as a vehicle for making inroads into the resources of the other colleges, while restricting access to their own, they create an atmosphere in which cooperation cannot survive. Neither the consortium nor an individual college should be a dominant factor. Disrupted relations can result from actual and imagined threats to institutional autonomies. The consortium's most essential characteristic is its ability to deal with conflicts over costs and benefits and to seek remediation before a deteriorating situation affects all cooperative programs.

5. **The consortium must be accepted as an extension of the member college campuses.** Some people tend to look on their consortium as a special purpose foundation which exists to support any ideas their own institutions cannot fund. Some administrators not wishing to become engaged in certain projects, may feel that it is easier to suggest that the consortium might be interested in a poorly developed project, than it is to discourage it. Consortia will not survive unless they are seen as a viable mechanism for improving the quality of campus programs and are not viewed as burial grounds for bad ideas. The majority of cooperative projects carry a heavy overhead in personnel time and institutional funds. The utilization of consortium resources should be drawn upon as judiciously as are those of the institution.

6. **The institutional focus cannot be subverted.** As a result of the difficulties that appear in the establishment of cooperative programs, many adjustments must be made between program inception and program implementation. A subtle shift away from the needs of the participating colleges into less relevant areas can take place, subverting the objectives of the consortium. The consortium cannot engage in very many operations that serve the region or selected faculty, but do not contribute to institutional goals, without eroding the basis for its long term health. Despite an evident success in raising funds and instituting unique programs, some consortia have lost support because of their tendency to become virtually autonomous in their operations. Whether an external degree program supplies a needed function, for instance, is not of as much importance as whether the program is perceived to be important by member colleges. Many other agencies can initiate needed programs more rapidly than a consortium. A consortium is the only organization that is expected to work through the members. It cannot work around them without jeopardizing its future.

7. **The consortium must go beyond the mere form of cooperation.** "When all else fails," remarked one consortium director, "gather data." Cooperation is not aimed essentially at sparking goodwill and benevolent attitudes, though these are traits of demonstrable value. It is all too easy to assume that, because people are actively participating in seminars or surveys, progress is being made. Maintaining a powerful sense of goal, along with movement toward that goal, is essential to obtaining an impact that is worth the hours and the dollars expended. Incentives for continued progress through cooperative ventures grow out of contact with the hard products achieved, not through contact with cooperative spirits. Despite an inherent intan-

4. See also, Grupe, Fritz H. "Founding Consortia: Idea and Reality" *Journal of Higher Education*, Vol. XLII, No. 9 (December, 1971), p. 747-762.

gibility of many of the outputs involved, the consortium will be held accountable for those tangible factors which can be identified. Commitments to specific achievements are of assistance in separating worthwhile programs from projects which lead to fragmentation of effort. Achievement kindles cooperation more often than the reverse.

8. **The totality of the consortium effort must be considered seriously if major conflicts are to be avoided.** It is all too common to find that the faith individuals put in a new consortium is quickly dampened because of actions that seem at the surface to go counter to the rationale for forming the consortium. Except, perhaps, in the case of special purpose consortia, willingness by one institution to act arbitrarily in one area will have broad ramifications for other areas as well. An individual instance of either apparent or real violations of the compact created can "prove the rule" even before the organization can get off the ground. While each institution must demand that it benefit from the overall operation of the consortium, it should not expect to benefit in each case. Occasionally each college must voluntarily participate in certain programs because it has established a strength that can in fact be shared. If an institution finds that it cannot share its expertise and resources as required, it should reexamine its reasons for further participation.

IV. JOINT CURRICULUM DEVELOPMENT

The heart of a college is the formal curriculum within which instruction is offered. There is no question but that many other factors within the college environment effect changes in attitudes, values and cognitive skills of a student attending college. More than any of these influences the nature of the curriculum is the element over which an institution's staff maintains greatest control. Whether it be provided in classroom settings, or field trips, in cultural programs or in film showings, instructors play the primary role in selecting the experiences to which a student will be exposed. Within the resources available to a given department, decisions must be made to deploy available staff, financial resources and facilities in a manner which is most closely consistent with the philosophy unifying the actions of that department. Cooperative interaction between similar departments has often been found to broaden the scope and increase the intensity of the curriculum for students involved. Joint operations require a change of perspective and a willingness to expend somewhat more effort than might be true if only a single department is involved. Seldom is the education of the student hurt by such agreements. More often it is strengthened. The listing of forms of curriculum cooperation given below provides concrete examples of just how some institutions have proceeded to improve courses, course sequences and the efficiency with which available expertise and facilities are utilized.

Joint Undergraduate Major. Through a grant to the Kansas City Regional Council for Higher Education under the Social Security Act, an urban social welfare program was instituted which included a variety of cooperative programs among fourteen colleges. It is useful to highlight the fact that an effective social welfare major could not have been offered by any of the colleges individually. An urban center was established to coordinate field experiences and formal credit seminars during an urban semester which enrolled students from each of the colleges. Faculty at each college organized a complementary but not identical set of course offerings in social work for students on campus. Major sequences included coursework from both locations.

Joint Masters Program. Elmira College and Alfred University cooperate in the offering of extension courses for teachers in the Corning Graduate Center. Graduate students are permitted to enroll in courses from both institutions. The student must indicate the institution from which he wishes to obtain his degree, but he receives residence credit from both colleges.

Rensselaer Polytechnic Institute and Albany Medical College together offer a biomedical engineering degree. After completing a four year engineering sequence at R.P.I. students transfer to the medical college for an additional two years. At the close of this time they receive both baccalaureate degrees in engineering and M.D. degrees.

Joint Ph.D. Degree. Since 1959 eight different disciplines (biology, chemistry, French, German, geology, philosophy, physics, and Spanish) within Five Colleges, Inc. have approved joint doctoral programs. Faculty members at the colleges directing thesis candidates are elected members of the graduate faculty at the University of Massachusetts at Amherst. Normally the graduate student is "in-residence" at the institution of his thesis advisor. The diploma awarded by the University and all pertinent records carry a statement indicating that he has earned a cooperative Ph.D. Many faculty from the colleges have been appointed to the University's graduate faculty to teach courses there. One of the many benefits of this program is the provision permitting faculty at undergraduate colleges to teach highly specialized graduate courses. In some cases this has assisted in the recruitment and retention of some faculty by the smaller colleges.

The State University of New York at Albany provides cooperative graduate programs in educational administration as well as curriculum and supervision in association with all of the State University Colleges. Under this program up to one-half of a student's curriculum sequence may be completed at the colleges before courses are taken at Albany. The program may lead to a professional certificate or to a doctoral degree.

A specialization in biometeorology is available to Ph.D. candidates within the Committee on Institutional Cooperation. A specialization in this field is taken within a Ph.D. program in a related area such as physics, geography, or zoology. Because of the expensive equipment and varied coursework needed to secure a specialization of this type, a student is permitted to move among campuses as necessary to use particular facilities, or to engage in specific coursework. The construction of duplicate laboratories is thereby avoided. Support for the establishment of the program has been given from several sources.

Contract Courses. For several years Rensselaer Polytechnic Institute has cooperated with Union College by having

its geology department staff offer all of the earth science courses held at Union. Professors are all R.P.I. faculty. The faculty involved teach at Union utilizing the instructional resources of R.P.I. The agreement enabled Union to avoid maintaining a small, inadequately supported department of its own and R.P.I. was able to include a wider variety of specializations within its staff.

Joint Department. To improve the quality and number of astronomy courses available within Five Colleges Inc., a joint department was established. It was believed that courses offered at each of the colleges could be organized to fit a major sequence and the resources committed to this discipline could be better planned. Presently a Ph.D. is offered as well as an undergraduate major. The department chairman is based at the University of Massachusetts at Amherst where most of the astronomers are located. One astronomer is located at each of the colleges. One distinct advantage of the joint department is the creation of more frequent professional contacts between specialists who are in the same disciplinary field but located on campuses without large astronomy staffs. Expensive astronomical equipment can be made available to students and faculty at all of the campuses.

Course Exchange. A frequent arrangement established bilaterally has been the extension of permission for students to take a specific specialized course, say Russian, at one institution, while students from that college are permitted to enroll in another specialized course, say embryology, at the other. In this way the laboratory or field facilities already in existence at neighboring colleges can be drawn upon by a wider potential student body.

Priority Scheduling. To overcome transportation difficulties and disjunctive calendars, cross-registration of students is not always possible on a scale which demonstrates a marked improvement. The Hudson-Mohawk Association of Colleges and Universities had success in cross-registration in evening courses. Consequently "consortium night" courses were designed to provide coursework that stimulated the movement of students. By holding weekly, single meeting courses, some of the time and travel problems were avoided.

Occasionally some regularly scheduled classes are specifically scheduled at times and in locations appropriate for improving access to them by students from other colleges.

Joint Listing of Area Studies. Several consortia maintaining cross-registration programs simply compile and publish up-dated listings of all courses being offered which pertain to a given topical area such as Black Studies, Asian Studies or Physics. The intent is to provide interested students with specific information about options open to them in neighboring institutions.

Departmental Specialization. Neighboring colleges or colleges within a consortium often find it beneficial to agree on the maintenance of non-competitive staffing or course offering patterns. Cornell University and Ithaca College have had a long standing agreement in the field of music in this regard. Ithaca offers a music education major which Cornell does not. Students from Cornell who wish to teach are encouraged to take the requisite courses at Ithaca.

Reduction of Course Offerings. It has been the case in many instances that certain low enrollment courses offered by cooperating colleges were eliminated by merging the classes. At times this permits a reduction in staff but usually it permits the scheduling of a wider diversity of offerings by freeing staff time for other purposes.

Joint Course. Faculty from several institutions may combine their talents in structuring a course that the staff from one institution could not assume on its own. For instance, two faculty members from different institutions in the Associated Colleges of the St. Lawrence Valley offered a one-semester course on nuclear reactors. Students from both colleges participated, as did occasional faculty lecturers from the other colleges. Each summer the Associated Colleges of the Mid-Hudson Area offers a course "The Natural History of an Estuary" which is similarly organized. Such courses are given resident credit by cooperating institutions even though a faculty member from each college may not be involved.

Common Core Course. The Triangle Association of Colleges initiated a summer institute to study interdisciplinary approaches to the study of the Humanities under a grant from the National Endowment for the Humanities. An outcome of the program will be the design, testing and expansion of a common course to be offered individually at each campus. By working together on the syllabus and on the preparation of teaching materials, a broader perspective is possible and more resources can be committed to improving the products developed. Common courses greatly facilitate the easy movement of students into advanced courses on different campuses.

Common Field Course. Although "Basic Limnology" is listed as a course in each of its member institutions' catalogs, this course is actually taught each summer under the auspices of the College Center of the Finger Lakes. Operating out of a base on Lake Seneca, students from all of the member colleges take the course and utilize specially modified instructional facilities and oceanographic vessels. They receive credit from their own institution even though a faculty member from each campus is not involved. Other limnology courses also are taught in the same manner.

Interterm Specialization. Many colleges have adopted the January short-term in an effort to open up their curriculums to consideration of more innovative approaches to education and to different course topics than are typical. Discussions about specialized offerings between staff at different institutions make it possible to capitalize on the unique strengths of cooperating institutions and to satisfy the educational desires of students.

Three-Two Program. Many liberal arts colleges have adopted agreements with engineering schools that permit a student to withdraw from the liberal arts college after three years to enroll for an additional two years at the professional engineering school. Upon completion of the five years of work the student is awarded both a bachelor of science degree in engineering from the professional school and a baccalaureate from the liberal arts college.

Articulated Program. The emergence of career ladder concepts and the growth of two-year colleges have encour-

aged the adoption of planned transition programs between two and four-year colleges. Beyond the simple acceptance of all credits earned at the two year college, articulated programs indicate that the course content of the two-year institution has been designed to complement, rather than duplicate or diverge from that offered at the four-year institution, and vice versa. It is becoming increasingly common for four-year colleges to automatically accept the course credits of graduates from articulated programs.

Traveling Scholar. The Committee on Institutional Cooperation was one of the first consortia to establish means by which graduate students at participating universities could cross institutional lines for supplementing the courses of study available to them at their own institutions. The traveling scholars agreement permits a student to remain registered in his home institution even though he spends a semester or a year at a participating university. The system has relieved pressure at all of the institutions to offer specialized or small enrollment classes, while providing institutions already offering these classes with a larger reservoir of interested students. Students have been able to attain specializations in their programs that would not have been possible otherwise. Direct contacts between institutional advisors makes close coordination between departments possible.

Rotating Summer Institute. In response to the need for more intensified and comprehensive studies of languages, the Committee on Institutional Cooperation formed faculty groups to explore the possibility of conducting cooperative programs in certain language areas, especially those not readily available in all university curricula. After undertaking an initial survey of the language courses being offered at the member universities, the faculty groups constructed language programs in areas where need was greatest and cooperation was feasible. The mechanism for operating these cooperative language programs is primarily the intensive summer institute. Held annually and usually under a rotation plan, the institute type program is designed to provide a comprehensive set of course offerings in language and area studies that not all institutions acting independently can offer. Thus, the institutes enable students to proceed to advanced degrees rapidly, while, at the same time, the cooperating institutions are able to avoid wide and expensive duplication of offerings. In addition, the institutes can provide an opportunity for faculty members to compare and assess their individual programs and work together in the development of instructional materials and quality courses.

Fixed Location Summer Institute. When one institution within a consortium has a strength in staff and facilities, it may not be desirable to shift particular programs from college to college each summer. Within the Committee on Institutional Cooperation, four institutions administering Slavic Language and Area Centers jointly sponsor a summer institute located at Ohio State University. Begun in 1967 with a grant from the U.S. Office of Education, the institute provides students from all of the consortium's universities with a comprehensive curriculum in Czech, Polish and Serbo-Croatian studies, as well as in related fields. An effort is made to staff the institute with outstanding scholars that could not have been as effectively utilized in diffused programs.

In a similar way, the Associated Colleges of the Midwest have enrolled the cooperation of Montana State University to provide an on-site summer course, "Introductory Geology in the Rocky Mountains". Geologists and students from the consortium and the University use Montana State's facilities and make excursions into the field from this base. A direct involvement with the study of the Rockies is possible in a way that simply would not have been possible otherwise.

Summer School Specialization. In less formal agreements than are needed to sponsor intensive institutes, many departments operating within consortia have found it desirable to coordinate their summer offerings. Given a generally reduced student population, it has been found effective to attempt to avoid a duplication of course offerings and to eliminate certain fields of study entirely by one or more of the cooperating institutions. One of the colleges may be asked to expand its offerings in certain fields to accommodate student interest and to provide adequate numbers of courses in a geographic region. Through coordinated summer school planning some totally new courses can be made available.

Joint Career Day. Foreign language staff within the Colleges of Mid-America sponsored a career day for high school students. The program consisted of presentations by CMA faculty, films, demonstration groups and U.S. Department of State speakers. The day encourages consideration of a language major for incoming students. Similar career days have been held for college students already committed to specific majors. By focusing placement attention on a particular "day" many companies and governmental agencies have found it profitable to send representatives to such meetings. The placement officers within the Associated Colleges of the St. Lawrence Valley, for instance, have sponsored a Federal Careers Day that approached the problem of assisting graduating students to locate suitable employment opportunities.

Common Resource Center. A Foreign Area Materials Center is maintained by a "consortium of consortiums" participating in the National Council for International Education. Faculty from twelve consortia can draw on the Center's staff for curricular materials, bibliographies, artifacts, and course syllabi which have been prepared. The Council also has sponsored overseas institutes through which selected faculty were able to engage in related educational programs in India and other non-western countries.

Joint Membership Application. Frequently small departments cannot become involved in projects or organizations of national scope because the cost of their participation in these ventures is greater than the value likely to be derived from their participation. Accordingly some cooperative centers have been able to secure eligibility for each of the members through a single application and membership fee. Although an arrangement such as this may restrict somewhat the extent to which any one college can participate,

each institution has a chance to learn more about the desirability of full membership without an undue commitment of resources.

Cooperative Proposal Planning. Each year the competition for funding under various federal, state and foundation programs increases. The percentage of applications approved and the amounts of money awarded are dropping in many of these programs. Often these programs consider geographic distribution as one criterion on which proposals are evaluated. It has become increasingly appropriate to arrange for coordination within a consortium in regard to exchanging information on proposal development. A joint submission of a proposal can strengthen the competitiveness of a program design. Often decisions can be made to withhold effort in preparing proposals in certain fields because the proposal at one college may be so strongly superior to others that there is little percentage in preparing a competing proposal. By conferring with one another, the prospects for objectively evaluating alternative approaches to a problem can also be improved.

Common Course Coding. In several bilateral agreements in which two colleges or coordinate colleges were closely cooperating, it has been prudent to develop common course coding techniques to facilitate the maintenance of records. As cross-registration agreements increase, the desirability of adopting comparable course descriptions and catalog numbers will become increasingly important.

Course-Content Improvement. The maintenance of adequate support materials for most curricula is a demanding and expensive task. In some fields sufficiently great numbers of common elements exist in comparable programs at different institutions to permit the joint development of various materials. The Cleveland Commission for Higher Education operated a project for interrelating the student teaching programs of its member institutions. The Commission's staff developed common student teacher handbooks, identical policies for working with supervising teachers and audiovisual materials for orienting student teachers to their task. These materials were subsequently employed by all of the teacher training institutions.

The Committee on Institutional Cooperation received National Science Foundation support to utilize audiovisual capabilities in bringing geology field trip experiences into the classroom. Comprehensive instructional materials on continental glaciation were compiled and study materials from several glacial deposit sites were collected. A 30-minute film on the collection sites, slides, instructional pamphlets and sample laboratory exercises were developed and made available to the cooperating universities.

Audio-Visual Materials Exchange. The Associated Colleges of the St. Lawrence Valley has assembled listings of its member colleges' films, filmstrips and slides. These listings made it possible for the total resources of the members to be shared and it permitted a check list against which future purchases could be analyzed to assure the acquisition of non-duplicative materials.

The Associated Colleges of the Midwest videotaped nearly 300 hours of various teaching/learning situations for utilization by the teacher education departments of its colleges. The edited tapes are used for in-class analysis and discussion with student teachers.

Film Library. A central film library which coordinates the acquisition and distribution of educational films was established to serve the twelve colleges affiliated with the Piedmont University Center in North Carolina. At the present time approximately 125 films are held representing many disciplines and fields of interest.

Parallel Program Development. The unique characteristics of each institution of higher education and the environments these institutions find themselves in often prohibit any direct substantive interrelationships. In addition, independent approaches to specific problems may in fact be more desirable than agreement on a single plan of action. When this occurs institutions may find that increased communications with one another improves the impact colleges may have in the creation of their own unique programs. For instance, in 1965, the New York State Education Department and the Danforth Foundation jointly sponsored a Five College Project to determine whether teacher preparation programs could be upgraded if the training programs were organized in reference to institutional goals and standards rather than according to Departmental certification and accreditation criteria. Five colleges in the State developed university-wide approaches to planning their own preparatory sequences. Throughout the creation and implementation of the separate projects, conferences were held, information and materials were exchanged, and occasional intercollege visits were scheduled. In this way each college benefited from the experiences of the others even though formal arrangements were absent. In 1972 a similar program exists to develop competency-based systems for certifying individual teachers. Ten trial projects to prepare criterion-based systems for assessing a teacher's performance are being approved for implementation around the State.

Concurrent Admissions. Private and group lessons in the performing arts are offered to Bronx Community College students by New York University at no cost to them. Following the graduation of the two-year college student, the University offers compatible junior and senior year programs to permit the students to receive a baccalaureate degree. Sufficient financial assistance is available to assure each student that the full program will be available.

Student Internships. Columbia University, Hunter College and Syracuse University have been assisted by the New York State legislature in providing internships in the Senate. The students acquire experience in the problems of governance and, in addition, participate in related academic programs.

The College Center of the Finger Lakes had two student interns at work studying study-abroad programs within the consortium. Information about the various programs were collected and recommendations for further cooperation were made.

External Degree Offerings. Representatives from fourteen colleges and universities in Central New York compose the policy making body for the External Degree Planning

Consortium which began in 1971. The Consortium's objective is to establish a network of support for offering a variety of external degrees. The first is a baccalaureate in business administration at Syracuse University.

V. FACILITIES SHARING

As the cost for establishing and maintaining specialized laboratories, field stations and the like has risen, many colleges have found that their own resources are inadequate to construct, staff or equip these facilities. At the same time the necessity for providing both student and faculty access to such supportive facilites becomes an essential component to many forms of higher education. The clearest and most readily documented cost efficiencies encouraged through consortia are those in which quality, high cost facilities are jointly operated for the benefit of several colleges. The cooperative utilization of many facilities is often more closely related to program improvement than to cost effectiveness. This is true because the only way in which certain facilities and equipment can be made accessible to many colleges is through a consortium arrangement.

Newer technologies for information retrieval, television and computing add another dimension to facilities cooperation. The physical characteristics and objectives of these systems imply a wide field of participation for optimum deployment. Technological networks cannot always function efficiently when they are operated by a single institution. They frequently cannot achieve significant results unless they are used to assist consumers over a wide geographic area, and contain procedures for actively involving the resources of many institutions. Hence, a consortium effort is desirable for large-scope networks.

Joint Utilization of Non-College Facilities. Many existing research or clinical facilities have been encouraging the involvement of college faculty and students to employ their resources for educational purposes. The Cold Spring Harbor Laboratory of Quantitative Biology has presented institutions of higher education throughout Long Island and New York City with many possibilities for graduate and undergraduate as well as faculty research in molecular biology. Comparable possibilities are open through the Brookhaven National Laboratory which also permits its faculty to accept adjunct appointments at these institutions. Several consortia of liberal arts colleges have been able to augment their regular course offerings in nuclear physics with an Argonne semester. During a semester at the national laboratory students assist Argonne staff in conducting advanced research, conduct their own experiments and study atomic physics through readings, seminars and lectures.

The Dayton-Miami Association of Colleges maintains an associate member category which permits non-educational organizations to work closely with the consortium. The arrangement encourages effective interaction with such organizations as the Cox Heart Institute, I.B.M., and the Monsanto Research Corporation. Including associate members facilitates exchanges at many levels of cooperation.

Shared Laboratories. The Five College Astronomy Department has achieved national distinction as a unique form of cooperation. A consortium radio astronomy observatory is being built at the Quabbin Reservation. The aperture of the new telescope is equivalent to that at Jodrell Bank in England. Other radio astronomy equipment and observational instruments are jointly owned and operated for use in research and instruction. This same consortium operates an electronic music laboratory for the five music departments.

Nearby colleges which establish cross-registration procedures can also agree to establish or refrain from establishing certain types of laboratories.

A joint Institute for Research on Learning and Instruction was organized by the City University of New York and the State University of New York to study the application and usage of newly emerging teaching techniques. Areas for study include programmed instruction, teaching machines and television. One project centered at an IBM research center utilized IBM equipment and software produced by Holt, Rhinehart and Winston for assessing computer assisted instruction effectiveness.

Originally founded by Albany Medical College, the Albany Study Center for Learning Disabilities now is administered by the State University of New York at Albany. Through continuing joint participation of both institutions the Center has been able to provide necessary elements for the specialized training of students in educational psychology, special education teaching, social welfare and medicine. Joint research projects provide substantial interdisciplinary achievements. The Center has obtained some support from foundations and the participating institutions. It is licensed as a child psychiatric clinic concerned with the detection, prevention and correction of learning difficulties.

A program to prepare dental assistants at Suffolk County Community College has been given valuable assistance by the Dental College-Health Science Center of the State University of New York at Stony Brook, which has made its dental facilities and staff available for a practicum situation. By sharing, the duplication of facilities and staffs can be avoided and the assistants are given an increased number of contact hours with practicing dentists.

Joint Field Station. A wilderness field station in Northern Minnesota was organized under the auspices of the Associated Colleges of the Midwest in 1962 and continues in operation. The station is located in Superior National Forest where a nearly original condition persists. Students of various natural sciences learn basic field research techniques and have a variety of close at hand ecosystems to study. Five and nine-week summer programs are offered under the direction of ACM faculty. Distinguished scientists and other speakers also contribute to a better understanding of the region.

Research and instruction on lake studies are conducted at a Finger Lakes Institute through the College Center of the Finger Lakes. Three research vessels of different sizes are fully outfitted with scientific instruments used to illustrate oceanographic and limnological study methods. A

full-time coordinator oversees implementation of undergraduate and science teacher summer courses and utilizes the largest ship for a winter term study in the Bahamas. Special laboratory and storage facilities with a docking area are supplemented with dormitory facilities owned by a nearby preparatory school. The ships used are converted government surplus vessels. The National Science Foundation has provided some financial assistance through special projects grants.

The State University of New York College at Oswego, the University of Quebec and the University of Trois-Riviere established a cooperative field school in archaeology. The school is located at Trois-Riviere, Canada.

Radio Station. Several consortia have nurtured the establishment of FM radio stations for their colleges. Although these stations mainly provide a source of music, some academic programs and related programming are carried by them.

Urban Center. Students enrolled in rurally located colleges have been exposed to urban studies including social work, teacher education and urban sociology. Through practical internships and on-site seminars students gain a direct familiarity with urban problems. Such centers have been created in Philadelphia by the Great Lakes Colleges Association and in Chicago by the Associated Colleges of the Midwest, to cite but two. The greatest benefits are derived from these centers when the semester or summer studies are correlated with on-campus majors which include the availability of the center as an integral part of the curriculum.

Downtown Education Center. In efforts to provide greater access to the educational resources of institutions of higher education, some groups of colleges within a city have sponsored the creation of special educational facilities in unserved areas. By providing special programs through a closer proximity to adults, high school or college age students, many departments have been able to serve a different clientele than could otherwise have been possible. The Associated Colleges of the Mid-Hudson Area developed this type of facility in Poughkeepsie, New York. A coordinator of urban programs was appointed to increase the courses offered and to bring about an effective convergence of the colleges' resources on urban educational problems.

The University Center in Harrisburg was a pioneer consortium effort aimed at bringing higher educational resources to bear on the needs of Harrisburg. Five institutions based outside of Harrisburg have provided undergraduate and graduate courses in widely different fields. A common facility is utilized.

Telephone Network. Eighteen colleges participating in the Kansas City Regional Council for Higher Education designed and installed a telephone network that provides them with a wide variety of educational services. Voice amplifiers, portable microphones and telewriters enable coursework, special conferences and seminars to be shared extensively. In addition, reduced cost for wide area telephone service for calls around the country is available.

Overseas Studies Center. Operating under an "agent college" concept in which specific member institutions assume the responsibility for administering programs on behalf of the consortium, the Great Lakes College Association coordinates student involvement in many study centers located in foreign countries. For instance, Earlham College which has a strength in Asian studies administers the center in Japan. Other consortia may operate centers of this type through central staff.

Cuttington College is a small, American-type liberal arts college in West Africa. The college enrolls students from many African countries. The Associated Colleges of the Midwest provides research and training opportunities at Cuttington for its own faculty and graduates. In addition to strengthening Cuttington College's staff capabilities, the program stimulates interest in African studies. Participants assist regular staff members, teach courses, conduct research and engage in a variety of projects.

The Federal University of Rio Grande de Sul at Porto Alegra, Brazil, makes provisions to accept twenty-five students each year from the universities within the Committee on Institutional Cooperation. Students enroll in a variety of courses and participate in a four-week course in the Portugese language.

Television Network. The televised offerings of Chicago's City College are broadcast over an educational television station. Faculty from regional community colleges then sponsor the courses for credit. Similarly, an ETV Council serving northern New York State transmitted a course in computer science. A faculty member of Jefferson Community College conducted an optional, one-hour on-campus session for students, faculty or community members who enrolled. Computer time was made available on the college computer for practice in programming.

Computer Cooperation. Cooperation in the employment of computing systems has been one of the most common areas in which consortia have been involved. The incompatibility of various computer systems, the varying input and output formats required for different types of colleges, the differences in computing languages needed for various purposes and the felt necessity to maintain adequate security of information are several of the major problem areas that have prohibited the realization of theoretically desirable objectives for computing operations. These factors are overcome often enough to prevent an extensive review of the types of cooperation that have been structured. Most forms, however, fall into one of the following categories:

An independently organized computing center in which a single large computer services several colleges.

An institutional computer which is adaptable to interactive terminals or batch processing equipment at other institutions.

A network of compatible computers which interact with one another to increase computing power or storage capacity.

A single computer operated by one campus allocates computer time to be used for instructional or research purposed by personnel from other campuses.

Student Transportation. To facilitate the movement of

students between campuses several consortia have instituted major bussing arrangements. Five Colleges Inc. operates one of the most frequent bus services to support an exchange of nearly three thousand cross-registrations a semester. Most consortia do not have sufficient demand for transportation services on the same order. Some colleges will make bus service available for specific courses in which cross-registration is particularly necessary. If special facilities are present that cannot be transported, then students must be transported. This is fairly commonly done on a limited basis. Taxis may also be used when a small number of students are cross-registered in different classes during the day. The Worcester Consortium for Higher Education, operates a limited bus service for several of its colleges which are in close proximity to one another.

Equipment Loans. When scientific and instructional equipment is expensive and is only used sporadically, it is expedient for some institutions to borrow these items from a neighboring college rather than duplicating these purchases. Through coordination of purchasing, a wider variety of equipment can be made available than might otherwise be possible. Within a consortium it may be desirable for the colleges to jointly purchase new equipment for use by all of the institutions.

Cooperative Education Center. In some rural regions there may be few opportunities for higher education because the population is inadequate to support a fully staffed institution. The Corning Graduate Center was instituted as a part of the College Center of the Finger Lakes to provide graduate coursework in just such a center. The Graduate Center provides classroom and library facilities for programs offered by Syracuse University (Master of Business Administration), State University of New York at Buffalo (Engineering), Alfred University and Elmira College (Education). College Center staff secure necessary support services, but the academic administration is maintained by the accredited institution.

VI. INTER COLLEGE STAFF UTILIZATION

The current surplus of highly educated and well trained people in higher education today provides a graphic illustration of the fact that many of the problems of colleges and universities are no longer related to securing competent people. Rather, their problems are related to fully utilizing available talents within more effective organizational structures or through the use of improved technological media. There is a distinct limitation on the extent to which reorganization within a particular school can effect further improvements in the level at which its faculty's talents are provided opportunities for maximum impact. Changes from departmental to divisional structures, or vice versa, seldom are able to offset the restriction inherent to a relatively fixed budget, to a generally slow turn-over of staff, and to a fixed level of student interest in a given discipline. In the smaller college these limitations are particularly telling. Through intercollege cooperation, avenues have been found to enable faculty to make full use of their competencies without having to exercise these talents at a cost to their home college. Concurrently, some forms of cooperation enable faculty to sharpen their ability to teach, to conduct research, or to function constructively in their institution by participating in planned educational experiences with their colleagues at other institutions.

Joint Appointment. Some colleges may find that existing staff cannot provide instruction in fields that are in low demand. Additional staff cannot, perhaps, be retained to offer courses in this area. Yet some demand may exist and the college may feel that an offering in the field may be of importance to a specific major or to a rounded liberal education. Such may be the case in Advanced Greek, or in the History of Science. Equally common are situations in which current student interest is high or in which available talents are scarce and/or expensive, such as in Black Literature, or the Role of Women in Society. In either case the only feasible recourse an institution may have, if it wishes to offer the courses in question, is to engage these services through the joint appointment of a scholar with another and possibly with a third college. Joint appointments permit a college to offer a course as its own and in a way that is designed to fit the existing curriculum. As in every case of cooperation, there are drawbacks, not the least of which are finding an instructor who will travel, finding commonly desired fields in which one specialist will be suitable, and achieving a suitably comfortable method for counting credit toward tenure, equivalent rankings or comparable fringe benefits. The difficulties may appear to be formidable, but they have been surmounted in a number of instances.

Faculty Exchange. Administratively simpler than a joint appointment is an agreement to swap professors on a *quid pro quo* basis. One instructor may travel to one college to offer a specific course while a second teaches a different course at the second college. Although some exchanges may be in the same discipline, they need not be.

Short-Term Faculty Exchange. The Associated Colleges of the St. Lawrence Valley annually publishes an inventory of faculty who have indicated a willingness to meet with students or faculty from other colleges in classroom or informal settings to discuss limited scope topics. The amount of time an individual is required to commit to preparation for an afternoon seminar, or for participation in a panel discussion is not great, but exchanges on this order permit faculty and student exposure to a greater variety of perspectives than may otherwise be possible. Individuals involved are not over-taxed because they specify the topics and areas in which they already possess interest and expertise. Focusing on performing artists, the Central States group also augmented its printed descriptions of each artist's talents and his prospective programs with audition tapes and preview slides. These materials are used by individuals to accurately plan public appearances, class contributions, and workshop assistance.

The Central States Colleges Association has twelve member colleges located in five states. Single afternoon and evening programs involve more travel time than is generally justifiable for brief encounters. Consequently, exchanges have been set up for two "faculty scholars" from each

institution to spend up to a week at one other college. During this time they meet classes in their disciplines, are scheduled for open lectures and participate in curriculum development activities.

Extra Duty Assignment. Full-time faculty regularly accept additional instructional assignments for added pay at other colleges. While this may not strictly be called interinstitutional cooperation, the inevitable offshoots of this form of interaction will affect the climate for exchanges of other types.

Team Teaching. A team teaching effort in Memphis, Tennessee involves six institutions in the teaching of a course "Inter-disciplinary Seminar in African Studies." The course emphasizes the interrelationships between many fields and hence requires expertise unavailable at a single institution.

Scholar-In-Residence. Practicing artists, performing arts groups, noted writers and lecturers will occasionally be available to spend a semester or a year on a college campus. The salary required to engage a well respected individual can run beyond the maximum that a small college or a small department can afford. By negotiating with these scholars in concord with several institutions, the required funds can be obtained. The services of the scholar not only are made available to more students, but his expertise is more efficiently utilized than might be the case if he were restricted to a single campus.

Company-In-Residence. Arrangements similar to the Scholar-In-Residence can be structured to include chamber music groups, symphonies and choral groups.

Staff Specialization. Exchanges of faculty, team teaching and other forms of cooperation entail consideration of an existing distinctiveness in faculty talents. While most such arrangements are agreed to after staff have been hired, some departments have encouraged such exchanges by voluntarily agreeing to hire specific types of individuals to avoid duplication in the courses offered and in the purchases of support materials. Naturally, agreements on this order presume that avenues for students to draw on these specializations are provided for.

On-Site Coordinator. In conjunction with North Western University, the Associated Colleges of the Midwest administers a program for children's theatre and creative dramatics. A faculty member from a member college supervises the project on behalf of all of the colleges. The project seeks to attract students interested in speech, drama, acting and play production into teaching at the elementary and junior high school level. All activities are centered in Evanston where housing accommodations are provided.

Program Developer. When colleges wish to enter into instructional activities in certain fields, they may find that existing staff has neither the time nor the background needed to formulate sound educational opportunities in these fields. For instance, several ecology field stations were established without specific programs being offered initially. First an individual was retained to conduct preliminary surveys of courses needed, to order appropriate research and instructional equipment, to solicit financial assistance, and to identify usable staff specializations. By jointly sponsoring the employment of a program initiator the consortium may get a foothold in fields such as urban studies, black studies, and overseas studies.

Staff Directory. Fifty colleges and universities participate in the Council of Institutions of Higher Education in New York City. Each year the Council publishes a brief directory listing the key academic and management personnel at the campuses to facilitate the identification of appropriate individuals with whom communications can be established.

Cooperative Student Interviews. To reduce the duplication of effort in the admission of students in social work programs within five universities in New York City, these institutions are sharing their interview reports. Permission from the candidate is requested to release the information.

Cooperative Teaching Assistantship. Under an Esso Education Foundation grant, Fordham University was able to implement a teaching assistantship project. Teaching fellows were selected from Fordham's graduate school to teach in fifteen liberal arts colleges in the area. The doctoral students obtained valuable teaching experience and the colleges secured well-qualified instructional assistance.

VII. COOPERATION TO IMPROVE RESEARCH

Since World War II the funds available to colleges and universities for conducting basic and applied research have played a major, if not a predominant role, in the shaping of these institutions. In spite of the problems imputed to be related to research activities, few persons have argued that research should not be given a central, hospitable place within higher education. By engaging in research, faculty play a most constructive part in the advancement of our understanding of the human condition, the nature of man's universe and the relationships between the two. Knowledge derived from research is of general benefit to society, but the relationship between research and teaching is less clear. Some institutions limit their emphasis in this area because of a commitment to teaching and/or community service. Others believe research is of critical importance in their own selection of goals. No institution is wholly pro or anti-research regardless of the priority it gives to this goal. However, opportunities for the faculty at some institutions to engage in research can be accomplished more satisfactorily by working with other colleges. This can be done without causing detrimental effects at the faculty member's home institution. The possibilities for cooperation between college personnel in research projects assume significant importance when the costs for establishing suitable libraries, research laboratories, and appropriate staffing patterns are taken into account.

Research Grants-In-Aid. The College Center of the Finger Lakes and the Piedmont University Center have long maintained annual grants-in-aid programs to support summer research projects by their faculty. Often the awards by the consortium are matched by equivalent awards from the recipients' institution. Small awards on the order of $400 -

$500 enable many faculty to undertake research that would have been beyond the budget of the recipients' college.

Research Seed-Grant. For several years the U.S. Office of Education funded projects to develop the research capabilities of faculty of small and middle size colleges. Seed-grants were one component of this program. A seed-grant was not intended to provide the total support for a given project, but was expected to strengthen an individual's ability to write a proposal that would be competitive with proposals from other institutions. Research committees for the consortia awarded these grants, and assisted the recipients in identifying appropriate consultants, in locating potential sources of funding and in securing appropriate assistance in proposal preparation.

Co-Authorship. An informal but frequent form of cooperation has emerged when investigators with similar or complementary research fields combine their efforts to complete and publish a study.

Research Consultation. Several consortia have published inventories of speakers and researchers to apprise all consortium faculty of existing expertise within the consortium. By reviewing the document, common fields of interest can be identified by a researcher and contracts can be made to solicit assistance.

Adjunct Appointment. Colleges cooperating in the usage of major research facilities, such as Brookhaven National Laboratory or Cold Spring Harbor Laboratory for Quantitative Biology, offer adjunct appointments to researchers. These appointments encourage the rapid diffusion of current research findings, along with the researcher's enthusiasm, into graduate and undergraduate curriculums.

Specialized Collections. The State University of New York at Buffalo and the State University of New York at Stony Brook have worked with other universities to microfilm and share their archives related to Mexico and Mexican studies. Other consortia through library agreements have held special indexes, little used research collections, and specialized journals in central depositories.

Cooperative Equipment Usage. Expensive or hard to acquire research instruments are often loaned between colleges or purchased jointly to increase the impact of resources committed to research projects.

Consortium Research. The rapid emergence of consortia in higher education has opened up a wide range of possible research topics with both theoretical and practical aspects. Individuals have begun to study the consortium as a social organization, as an administrative mechanism and as a potential resource to particular departments.

State of the Discipline Research. One of the most common types of research involvement associated with consortia is the combining of effort of faculty in a given field to attempt an assessment of the status of instruction, research or community service functions offered by member colleges within a given problem area. Opportunities for future development are explored and recommendations for solutions to the problems are made by intercollege study groups.

Conrad established a Commission on Black Consciousness to clarify the implications of black consciousness for its theological schools. The commission consists of faculty and students from member institutions and representatives from community organizations. Workshops on Black problems, research on needs and resources, and plans for "re-educating" faculty and support personnel are a part of the effort to re-examine the future of Black student programs.

Research Coordination. A major reason for the creation of the Higher Education Center for Urban Studies in Bridgeport was the feeling that thought should be given to coordinating research on urban problems throughout southwestern Connecticut. The consortium has cooperated with the Urban Coalition, the Urban Corps and other organizations in the establishment of non-competitive research studies as well as in the initiation of action programs designed to implement conclusions of the studies. The coordination of research provides a valuable mechanism for improving the relations of the member colleges with the community.

VIII. FACULTY DEVELOPMENT THROUGH CONSORTIA

Most consortia enroll the participation of notably different types of institutions in their memberships. Even cooperative groupings of liberal arts colleges involve a high degree of variability in the types of major fields offered and in the specializations at each college. Thus, a search for common grounds on which cooperative ventures can be based is always a demanding task. Nonetheless, every consortium has one common characteristic which is of importance to its member institutions. The teaching/learning process is central to the academic life of faculty, students and administrators alike. Accordingly, many college associations have scheduled and implemented activities that attempt to improve the teaching process. Since a better understanding of this process is of direct value to faculty, seminars and workshops dealing with the improvement of instruction or with the upgrading of faculty and staff competencies are commonly suggested as first steps in initiating larger scope cooperative ventures.

Acting in large measure as agents of change within their member colleges, consortia also schedule seminars and conferences that assist in the rapid dissemination of information about new practices in higher education. These practices may pertain to developments within the consortium as often as they may deal with developments in non-member institutions. By holding informational meetings on such things as the use of new media, teaching evaluation and curriculum design, a close contact with experts can be initiated that may be lacking when similar topics are discussed at professional, large audience, conferences. These meetings stimulate further thought about the ways in which new ideas can be transformed into action programs. These meetings also provide an opportunity to disseminate information about resources and resource individuals who are within a consortium and can be drawn upon for further assistance. Most faculty have not had

professional training in the management of educational techniques and practices. Through jointly sponsored meetings, faculty with common concerns about their approach to teaching can be assembled to explore new instructional techniques.

Disciplinary seminars can be held that focus attention on new areas of research which interest faculty. Also, the seminars can up-date faculty background in specific topics that were lacking in their professional training. Because many departments have relatively small numbers of staff, a "critical mass" of experts in a particular field may not be present unless these individuals are considered in relation to their colleagues of other institutions. The possibility of organizing many meetings of this nature would be limited if multicollege involvement were not possible.

Interdepartmental meetings serve an important social function as well. In addition to the tangible improvement of faculty and staff capabilities, multicollege meetings provide a social involvement conducive to more substantive joint programs. A familiarity with one's peers is helpful in stimulating the growth of a sense of community that is basic to more productive enterprises. Such contacts also enable new faculty to make contact with experienced staff members at other colleges able to be of assistance to them in developing course work.

Faculty Visitation. Informal agreements to encourage the faculty within given departments to visit one another's classes and laboratories for short periods of time provide a social and physical familiarity with the resources available at the institutions that cannot normally be derived from structured meetings. The translation of a philosophy of education into operational terms within a classroom setting cannot be determined entirely by reviewing catalog course descriptions or by touring the facilities in which classes are housed. Through regular inter-class visitations, a clearer understanding of this operational philosophy is obtained by the visitor. Engagements of this type can facilitate the diffusion of new teaching ideas and they suggest ways by which the several faculties can be of assistance to one another.

Informal Association. Undergirding the formation and continued utilization of sophisticated cooperative arrangements lies a base of social and professional goodwill. As the first step in building a valuable relationship some groups of faculty have simply organized occasional dinners or luncheons without an intention to focus attention on a specific topic. The opportunity to discuss a variety of points of interest, from textbooks available to experiences in teaching different types of students, leads to the stimulation of productive ideas for further interchanges. In some areas the pervasive importance of these meetings has led to the formation of an identifiably real "mathematics community" or of an "artists league".

Sponsorship of Regional Professional Organizations. Colleges and universities have long provided for the nurturance and maintenance of scholarly and professional organizations as a commitment to furthering their own goals of teaching, research and community service. In some instances consortia have been the host for particular groups. The College Center of the Finger Lakes has sponsored the College English Association in New York State. The Center's staff works with officers of the Association in planning, coordinating and financing the annual meetings and subsequent reports. By sponsoring the Association, professional recognition is secured for all of the member colleges and a mechanism is established for exposing member college faculty to contemporary trends in English teaching and writing.

IX. COOPERATIVE CO-CURRICULAR AGREEMENTS

Strong academic programs do not rely upon classroom activities alone. The classroom experiences are bolstered with informal supportive activities. The impact a college has on its students may be measurably increased, or dramatically retarded, by the diversity and quality of out-of-class opportunities that can be provided. It is difficult, however, for most colleges to offer both a truly "balanced" co-curricular program and a program of offerings that touches directly upon a wide variety of different departments. The expenses in money, time and effort in bringing speakers to campuses, in scheduling inter-disciplinary activities of major scope, and in augmenting structured programs with informal gatherings severely restricts the potential scope of events that any department can participate in. When a department is small, or if a discipline is contained within a larger administrative unit, the contribution individual faculty can make is particularly limited. It is not at all uncommon for suppiemental, but important, activities to be scheduled so that several colleges can participate in activities that go beyond the resources of the separate colleges.

Joint Sponsorship of Speakers. Cultural affairs committees have known for a long time that some speakers and performing groups are available at such great cost that committees could not afford them without pooling their resources with those of neighboring colleges. Individual departments sponsor speakers in numbers that are of more than passing importance. Yet, departmentally sponsored speakers are seldom co-sponsored despite the limited availability of some speakers. It is probable that considerable benefit could be derived from departmental funds committed to this form of cooperation.

Joint Sponsorship of Major Activities. Similarly, major weekends and cultural events can have their value increased by multicollege involvement. For instance, the Alabama Center for Higher Education sponsored a weekend "Black Montage" during which Black artists, musicians and political figures provided students and faculty with an intensive exposure to high quality programming. Jazz weekends, Shakespearian festivals and regional art exhibitions have also been organized through consortia.

Joint Professional Organizations. The Sigma Xi Honorary Fraternity in Science at Clarkson College recently received its formal charter from the national body. Faculty that originally sponsored this chapter had represented four different institutions within the Associated Colleges of the

St. Lawrence Valley. The permanent charter acknowledges the continuing contribution these fellow colleges make by noting that the organization was formed in association with St. Lawrence University, S.U.N.Y. College at Potsdam, and the S.U.N.Y. Agricultural and Technical College at Canton.

Cooperatively Sponsored Exhibits. Art shows of consortium faculty and students are frequently organized among colleges in which the number of art majors or teaching staff is limited. By combining their artworks a significant and positive element is introduced that is conducive to an improved recognition of the role of the visual arts in society and on a college campus. Some scientific agencies provide traveling exhibits that are hosted by groups of colleges to expand the potential audience these exhibits attract.

Art Mobile. The University Center in Virginia, in cooperation with a museum of art, operates a mobile van equipped to serve as an art gallery. Special art and sculpture exhibits are brought together to tour member colleges for short periods of time, thereby greatly improving the chances that given campuses will secure these art works.

Visitation Teams. The U.S. Department of State through its community meetings program works with colleges and universities to send a team of diplomats and international relations experts to locations throughout the country. Host institutions schedule class visits, panel discussions, press interviews and community meetings at which team members discuss topics of concern.

Seminar Series. Few institutions are large enough to be able to sponsor a continuing series of seminars of a broad theme without drawing on the staff at other institutions. The computing committee of the Associated Colleges of the St. Lawrence Valley sponsored a series of fifteen seminars on computer applications in a variety of disciplines to broaden the background of faculty and students in this field. Faculty have been invited at several locations to less formal gatherings in series related to environmental problems, ethnic difficulties, governmental problems, and the roles and purposes of colleges and universities.

The Associated Colleges of the Midwest is housed in the Newberry Library Building in Chicago. The Library is noted as a research resource in the humanities. Each year a semester-long seminar is organized around a different period in Western history. Faculty and students can spend a semester at the Library making use of its resources in history and literature. Each student conducts independent research and participates in frequent lectures and seminars related to the time period selected.

Supplementary Course-related Workshops. Theology students within Conrad who register for similar types of courses on their individual campuses are regular participants in all-day seminars that bring the classes together. Held on Saturdays, the series of sessions are based at campuses with specific strengths. Unlike other seminars, these workshops are planned to complement the coursework at the several schools.

Charter Flights. For economy and the convenience of member college faculty and students, some consortia have organized "affinity groups" to travel to Europe and Asia during summer and interterm periods. Some coursework may be integrated with these trips, but many are of individual value without being tied to academic credit.

Student Conferences. Science majors and political science majors, among others, have been invited by their colleges to prepare scholarly papers for presentation in joint student conferences. An association of students with peers in a professional environment provides an incentive which is often missing in regularly scheduled classes. Student conferences offer the possibility of a demonstrably different type of learning experience than is usually available at any one campus.

Scholarly Journal. One of the more common hopes accompanying the establishment of consortia is that a literary or scientific journal would be issed which member college faculty would find a receptive vehicle for publishing manuscripts that are of value to other faculty within and without the consortium. There are many problems that have prevented these ideas from taking shape. Not the least of these are the acquisition of adequate quality entries, interest in the publication outside of the consortium and the commitment of financial resources by the member colleges. Five Colleges Inc. has published *The Massachusetts Review*. The *Review* carries articles, essays, literary works, and reviews.

Training Programs and Institutes. As a central component of a project to improve intercollege cooperation in supervising student teachers, the College Center of the Finger Lakes undertook to train its faculty in the use of certain behavioral science instruments that can be used to assess teaching performance. A one-week institute was offered during the first summer of the program and additional workshops directly related to the extended use of these instruments were held during the year. In this way a common base of understanding was established at each campus. The initial information base was essential for further programs and for adopting particular instruments for special consideration.

Through the Regional Cooperative Computing Program, the National Science Foundation has assisted in the creation of computer networks. The mere presence of time sharing equipment was found not to be sufficient to attain increased computer usage. Consequently, recent projects have included considerable support for long-term training programs to acquaint faculty with programming techniques and to familiarize them with computer equipment and specific programs available in their field of interest.

Joint Conferences and Workshops. In a similar way, short programs of from one hour to two days' duration frequently are scheduled by consortia to upgrade faculty knowledge in restricted fields. Although many of these programs are either self-contained or otherwise unrelated to future programs, it has been found that the most valuable contributions of consortium workshops emanate from sessions that lead into programmatic changes.

Traveling Workshops. The Kansas City Regional Council flew a number of its computer center directors to a meeting with their peers in the Regional Educational Laboratory in Virginia. The two groups exchanged information about experiences on computer cooperation and developed or

tested out other ideas. Economics faculty from within the College Center of the Finger Lakes spent two days in Washington. Five agencies concerned with national economic policy development were visited for seminars and discussions with the agencies' staff.

Faculty Audit Privileges. Staff members employed at member colleges of the Kentuckiana Metroversity can keep up with developments in special fields of interest by auditing courses throughout the consortium at no charge.

Graduate or Special Student Cross-Registration. Faculty enrolled as graduate or special students in the institutions participating in the Associated Colleges of the St. Lawrence Valley are eligible for cross-registration privileges. The agreement permits faculty to take courses at all four institutions for residence or audit credit without a tuition charge.

Faculty Vacancies Listing. Each spring the Associated Colleges of the St. Lawrence Valley compiles a listing of all teaching and administrative positions available for the coming year. Interested faculty can draw upon the listing for personal consideration or for suggesting qualified individuals to appropriate departments.

Proposal Development Grants. A number of consortia have followed the early example set by the Committee on Institutional Cooperation by budgeting funds for preparing designs for cooperative programs. Seed-grants are offered to groups of individuals which are seriously interested in exploring an idea for cooperation. The grant covers travel and other expenses incurred in holding interinstitutional meetings or in preparing groundwork. The seed-grant is a visible avenue for pursuing an idea to a more completely formulated stage.

Joint Recruiting. Professional resumes of applicants for teaching and administrative positions can and are exchanged between many groups of colleges. This is particularly helpful in fields in which recruiting is most difficult, whether this difficulty is due to a limited pool of applicants, or because of the department's size and budget. By drawing upon "screened" applications, fewer expenses may be entailed in locating qualified applicants.

Specialized Teaching Opportunities. The possibilities for faculty of small institutions to develop their own expertise in specialized areas are distinctly limited. Although the focused interests of some faculty may be too esoteric to permit their background to be utilized effectively, arrangements to have these individuals available for upper division and graduate teaching assignments have been developed. Unlike typical joint appointments, the motivation for splitting an individual's time between institutions is neither economic efficiency or improved utilization of staff, though these outcomes may result. Instead, the primary concern is with the faculty member's capacity to continue his disciplinary development without forcing his home institution to expand course offerings beyond those required.

Open Activities Policies. To encourage the participation of students from cooperating campuses in extracurricular activities based at one campus, some institutions invite all students from within a consortium to participate in clubs and study groups. For example, international relations clubs, computing groups, and domestic affairs clubs have enabled students within several consortia to engage in their activities because their own campus lacked a similar group.

X. A BRIEF LISTING OF ARRANGEMENTS

I. JOINT CURRICULUM DEVELOPMENT

Joint Undergraduate Major
Joint Masters Program
Joint Ph.D. Degree
Contract Courses
Joint Department
Course Exchange
Priority Scheduling
Joint Listing of Area Studies
Departmental Specialization
Reduction of Course Offerings
Joint Course
Common Core Course
Common Field Course
Interterm Specialization
Three-Two Programs
Articulated Program
Traveling Scholar
Rotating Summer Institute
Summer School Specialization
Joint Career Day
Common Resource Center
Joint Membership Application
Cooperative Proposal Planning
Common Course Coding
Course Content Improvement
Audio-Visual Materials Exchange
Film Library
Parallel Program Development
Concurrent Admissions
Student Internships
External Degree

II. FACILITIES SHARING

Joint Use of Non-College Facilities
Shared Laboratories
Joint Field Station
Radio Station
Urban Center
Downtown Education Center
Telephone Network
Overseas Studies Center
Television Network
Computer Cooperation
Student Transportation
Equipment Loans
Cooperative Higher Education Center

III. INTER COLLEGE STAFF UTILIZATION

Joint Appointment
Faculty Exchange
Short-Term Faculty Exchange
Extra Duty Assignment
Team Teaching
Scholar-In-Residence
Company-In-Residence
Staff Specialization
On-Site Coordinator
Program Developer
Staff Directory
Cooperative Student Interviews
Cooperative Teaching Assistantship

IV. COOPERATION TO IMPROVE RESEARCH

Research Grants-In-Aid
Research Seed-Grant
Co-Authorship
Research Consultation
Adjunct Appointment
Specialized Collections
Cooperative Equipment Usage
Consortium Research
State of Discipline Research
Research Coordination

V. FACULTY DEVELOPMENT THROUGH CONSORTIA

Faculty Visitation
Informal Association
Sponsorship of Regional Professional Organizations
Scholarly Journal
Training Programs and Institutes
Joint Conferences and Workshops
Traveling Workshops
Faculty Audit Privileges
Graduate and Special Student Cross-Registration
Faculty Vacancies Listing
Proposal Development Grants
Joint Recruiting
Specialized Teaching Opportunities

VI. COOPERATIVE CO-CURRICULAR AGREEMENTS

Joint Sponsorship of Speakers
Joint Sponsorship of Major Activities
Joint Professional Organizations
Cooperatively Sponsored Exhibits
Art Mobile
Visitation Teams
Seminar Series
Supplementary Course-Related Workshops
Charter Flights
Student Conferences
Open Activities Policies

APPENDIX A

Formal Consortia In Higher Education*

Academic Affairs Conference of Midwestern Universities
Hulman Center, Room 419
Terre Haute, Indiana 47809

Alabama Center for Higher Education
Suite 1011
2121 Eighth Avenue North
Birmingham, Alabama 35203

Alabama Consortium for the Development of Higher Education (The)
P.O. Box 338
Dempolis, Alabama 36732

Associated Colleges of Central Kansas
115 E. Marlin
McPherson, Kansas 67460

Associated Colleges of the Mid-Hudson Area
12 Vassar Street
Poughkeepsie, New York 12601

Associated Colleges of the Midwest
60 West Walton Street
Chicago, Illinois 60610

Associated Colleges of the St. Lawrence Valley
38 Market Street
Potsdam, New York 13676

Association of Colleges and Universities for International-Intercultural Study
Huntingdon College
Montgomery, Alabama 36106

Atlanta University Center
55 Walnut Street, Southwest
Atlanta, Georgia 30314

Attrition Reduction Consortium
Lakeland College
Sheboygan, Wisconsin 53081

Brooklyn Institutional Council
Hotel Bossert
Suite 829
98 Montague Street
Brooklyn, New York 11201

Central Pennsylvania Consortium
Gettysburg College
Gettysburg, Pennsylvania 17325

Central States College Association
1308 20th Street
Rock Island, Illinois 61201

Chicago Consortium of Colleges and Universities (The)
410 South Michigan Avenue
Chicago, Illinois 60605

Christian College Consortium
1400 Touhy Avenue
Des Plaines, Illinois 60018

Claremont Colleges (The)
Harper Hall
Claremont, California 91711

Cleveland Commission on Higher Education
1367 E. Sixth Street
Cleveland, Ohio 44114

College Center of the Finger Lakes
Houghton House 22 West 3rd Street
Corning, New York 14830

Colleges of Mid-America, Inc.
Insurance Exchange Building
Suite 415
7th & Pierce
Sioux City, Iowa 51101

Committee on Institutional Cooperation
Suite 970
1603 Orrington Avenue
Evanston, Illinois 60201

Conference of Rectors and Principals of Quebec Universities
6600 Chemin de la Cote des Neiges
Suite 300
Montreal 249, Quebec

Conrad, Inc.: The Consortium for Higher Education Religion Studies
1435 Cornell Drive
Dayton, Ohio 45406

Consortium of Northern New England
232 Maine Street
Brunswick, Maine 04011

Consortium of Universities of the Washington Metropolitan Area
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Cooperating Raleigh Colleges
Meredith College
Box 399
Raleigh, North Carolina 27611

Council of Higher Educational Institutions in New York City
461 Park Avenue South
New York, New York 10016

Council of Ontario Universities
102 Bloor Street West
Toronto 181, Ontario Canada

Dayton-Miami Valley Consortium
300 College Park Avenue
Dayton, Ohio 45409

East Central College Consortium
Westminster College
New Wilmington, Pennsylvania 16142

Erie Consortium of Colleges
501 E. 38th Street
Erie, Pennsylvania 16501

Five Colleges, Incorporated
Box 740
Amherst, Massachusetts 01002

Great Lakes Colleges Association
Suite 26J
555 E. William
Ann Arbor, Michigan 48108

Greensboro Tri-College Consortium
Guilford College, Downtown Division
501 Washington Street
P.O. Box 1709
Greensboro, North Carolina 27402

GT/70 (Group Ten Community Colleges for the Seventies)
Suite 206
5942 S.W. 73rd Street
South Miami, Florida 33143

Higher Education Center for Urban Studies
328 Park Avenue
Bridgeport, Connecticut 06604

Higher Education Coordinating Council of Metropolitan St. Louis
5600 Oakland
Rooms F 313-19
St. Louis, Missouri 63110

Hudson-Mohawk Association of Colleges & Universities (The)
356 Troy-Schenectady Road
Latham, New York 12110

Interuniversity Council of the North Texas Area
Room 512, UTA Library
Box 36, UTA Station
Arlington, Texas 76010

Inter-University Institute of Engineering Control
University College of N. Wales
School of Engineering Science
Dean Street, Bangor, Caerns
Wales, England

Kansas City Regional Council for Higher Education
Suite 320
4901 Main
Kansas City, Missouri 64112

Kentuckiana Metroversity, Inc. (The)
U. of L. Kentucky Southern Campus
9001 Shelbyville Road
Louisville, Kentucky 40222

Lehigh Regional Consortium for Graduate Teacher Education
School of Education
Lehigh University
Bethlehem, Pennsylvania 18015

Lehigh Valley Association of Independent Colleges, Inc.
87 West Church Street
Bethlehem, Pennsylvania 18018

Mid-Appalachia College Council, Inc.
Box 391
Bristol, Tennessee 37620

*Taken from Lewis D. Patterson's *Directory of Voluntary Academic Cooperative Arrangements in Higher Education*, distributed by the Kansas City Regional Council for Higher Education, 1971.

New Hampshire College and
University Council
Library Building, Notre Dame College
2321 Elm Street
Manchester, New Hampshire 03104

New Orleans Consortium
Palmetto and Pine Streets
New Orleans, Louisiana 70125

Northern Plains Consortium
Jamestown College
Jamestown, North Dakota 58401

Piedmont University Center of
North Carolina, Inc.
Reynolda House
Box 11045 Bethabara Station
Winston-Salem, North Carolina 27106

Pittsburgh Council on Higher
Education
222 Craft Avenue
Pittsburgh, Pennsylvania 15213

Regional Council for Institutional
Education
1101 Bruce Hall
University of Pittsburgh
Pittsburgh, Pennsylvania 15213

San Francisco Consortium (The)
The Balboa Building
Suite 516
593 Market Street
San Fransico, California 94105

Six Institutions' Consortium
Bennett College
700 Gorrell
Greensboro, North Carolina 27420

South Carolina Foundation of
Independent Colleges, Inc.
1110 Daniel Building
Greenville, South Carolina 29602

Southwest Alliance for Latin America
1700 Asp Avenue
Norman, Oklahoma 73069

Texas Association of Developing
Colleges
B-116 Braniff Tower
Exchange Park
Dallas, Texas 75235

The Association for Graduate
Education and Research of
North Texas (Tager)
Tager Building
2400 N. Armstrong Parkway
Richardson, Texas 75080

Triangle Association of Colleges
Middleburg Office Mall
Suite 212-C
2700 Middleburg Drive
Columbia, South Carolina 29204

Twelve College Exchange
Two Hebe Court
Norton, Massachusetts 02766

Union for Experimenting Colleges
and Universities
Antioch College
Yellow Springs, Ohio 45387

Union of Independent Colleges of
Art
4340 Oak
Kansas City, Missouri 64111

United Colleges of San Antonio
427 Gunter Office Building
159 E. Houston Street
San Antonio, Texas 78205

University Center in Georgia
Lustrat House
University of Georgia
Athens, Georgia 30601

University Center at Harrisburg
2991 N. Front Street
Harrisburg, Pennsylvania 17110

University Center in Virginia
The Jefferson Hotel
Jefferson and Main Streets
Richmond, Virginia 23220

Worcester Consortium for Higher
Education, Inc.
Boynton Hall
Worcester Polytechnic Institute
Worcester, Massachusetts 01609

National Council of Associations
for International Studies
(NCAIS)
Foreign Area Materials Center
60 East 42nd Street
New York, New York 10017